

No.	Name	Material
1	Raptr Screw Anchors	High strength steel bright zinc plated to 5Mu

**Building materials** **Qualities**



Screw size		7.5 / T30	
Concrete C20/25			
$N_{Emp}$	Recommended tension load <sup>1)</sup>	kN	1.2
$V_{Emp}$	Recommended shear load <sup>1)</sup>	kN	0.8
$V_{Emp}$	Recommended shear load <sup>2)</sup>	kN	1.6
$h_{ef}$	Effective anchorage depth	mm	30
$T_{inst}$	Torque for anchoring	Nm	20
$h_1$	Drill hole depth	mm	40
$d_0$	Drill hole-Ø in the building material	mm	6

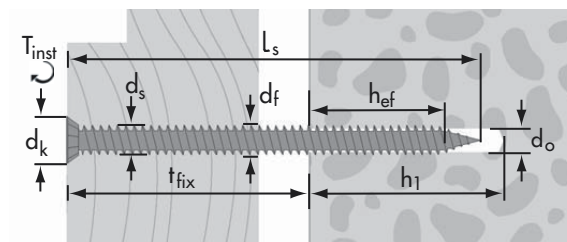
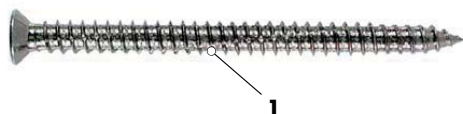
Brick			
$N_{Emp}$	Recommended tension load <sup>1)</sup>	kN	0.8
$V_{Emp}$	Recommended shear load <sup>1)</sup>	kN	0.5
$V_{Emp}$	Recommended shear load <sup>2)</sup>	kN	1.2
$h_{ef}$	Effective anchorage depth	mm	40
$T_{inst}$	Torque for anchoring	Nm	15
$h_1$	Drill hole depth	mm	50
$d_0$	Drill hole-Ø in the building material	mm	6

Aerated concrete			
$N_{Emp}$	Recommended tension load <sup>1)</sup>	kN	0.2
$V_{Emp}$	Recommended shear load <sup>1)</sup>	kN	0.1
$V_{Emp}$	Recommended shear load <sup>2)</sup>	kN	0.3
$h_{ef}$	Effective anchorage depth	mm	60
$T_{inst}$	Torque for anchoring	Nm	5
$h_1$	Drill hole depth	mm	assembling without pre-drill
$d_0$	Drill hole-Ø in the building material	mm	

$M_{Emp}$	Recommended bending moment	Nm	17
$d_f$	Hole-Ø in the attached part	mm	6
$d_k$	Ø-head	mm	11

Safety factor of 3 included

All information detailed in our data sheets is based on technical approvals, formulas and site or laboratory testing under optimum conditions and include a stated safety factor. As we have no direct or indirect control over where or how our products are applied or installed, we do not accept any liability either directly or indirectly arising from the use of our products, whether or not in accordance with any advice, specification or recommendation given by us. Stated loads are for guidance only and we always recommend site testing of all products for application suitability.



No.	Name	Material
1	Raptr-Plus Screw Anchors	High strength steel with Screw Armour™ Ceramic Coating

### Building materials

### Qualities



Screw size		7.5 / T30	
Concrete C20/25			
$N_{Emp}$	Recommended tension load <sup>1)</sup>	kN	1.2
$V_{Emp}$	Recommended shear load <sup>1)</sup>	kN	0.8
$V_{Emp}$	Recommended shear load <sup>2)</sup>	kN	1.6
$h_{ef}$	Effective anchorage depth	mm	30
$T_{inst}$	Torque for anchoring	Nm	20
$h_1$	Drill hole depth	mm	40
$d_0$	Drill hole-Ø in the building material	mm	6
Brick			
$N_{Emp}$	Recommended tension load <sup>1)</sup>	kN	0.8
$V_{Emp}$	Recommended shear load <sup>1)</sup>	kN	0.5
$V_{Emp}$	Recommended shear load <sup>2)</sup>	kN	1.2
$h_{ef}$	Effective anchorage depth	mm	40
$T_{inst}$	Torque for anchoring	Nm	15
$h_1$	Drill hole depth	mm	50
$d_0$	Drill hole-Ø in the building material	mm	6
Aerated concrete			
$N_{Emp}$	Recommended tension load <sup>1)</sup>	kN	0.2
$V_{Emp}$	Recommended shear load <sup>1)</sup>	kN	0.1
$V_{Emp}$	Recommended shear load <sup>2)</sup>	kN	0.3
$h_{ef}$	Effective anchorage depth	mm	60
$T_{inst}$	Torque for anchoring	Nm	5
$h_1$	Drill hole depth	mm	assembling without pre-drill
$d_0$	Drill hole-Ø in the building material	mm	
$M_{Emp}$	Recommended bending moment	Nm	17
$d_f$	Hole-Ø in the attached part	mm	6
$d_k$	Ø-head	mm	11

Safety factor of 3 included

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# SCREW **armour**<sup>TM</sup> High Performance Coating

## What's Screw Armour ?

ScrewArmour is a specially formulated European plating system designed specifically for high performance corrosion protection of external grade fasteners. It is an 8 stage multiple layering system of zinc, chemical polymers and a tough double layer ceramic coating which is stage baked at high temperatures to provide a super tough anti-corrosion coating far superior than any standard galvanising.

The top colour coat provides a non protective decorative finish with ScrewArmours superb anti-corrosion properties coming from the bonded underlying layers. The coating is incredibly hard and scratch resistant making it virtually impossible to reveal the base metal during normal wear and tear. This tough coating makes it perfect for thread cutting fasteners and self drilling screws where normal galvanising and other finishes can peel, wear off or breakdown during installation as well as protecting driver recesses which often suffer plating damage, particularly when using impact drivers and powerful screwguns.

ScrewArmour is fully resistant to acid and alkaline attack and as the top layers are not metallic based, it is completely resistant to galvanic corrosion. So for metal, you can use it with any other metal or surface coated product with no cross contamination corrosion issues and for timber you can safely use it anywhere, with any timber (hard or softwood) along with any timber preservatives including CCA and ACQ pressure treatments.

ScrewArmour coated fasteners fully exceed the performance of class 4 galvanising and conform to corrosive gas test standard (Kesternich) DIN50018 giving a salt spray fog test exceeding (JISZ2731) 1,000 hours (ASTM B117).

## How does it Compare to Galvanising ?

- It has considerably superior high performance long term corrosion resistance lasting over 6 times longer than standard galvanised finishes, with excellent performance against gas, abrasive weathering and other corrosive factors including salt water and spray, humidity and high UV environments.
- It is resistant to acid and alkaline attack, galvanic corrosion and hydrogen embrittlement.
- It offers corrosion resistance against scratches, nicks and marks with composite layers providing underlying base metal protection.
- It's electrolytic corrosion resistance means there are no contact corrosion issues with other metals and so can be safely used with any base material in any condition wet or dry.
- It is compatible with all uncoated, coated and pre-painted metal surfaces and is paintable if required without special preparation requirements.
- The smooth fine layered coating offers excellent visual paint grade aesthetics and prevents the common problem of coated fastener threads and driver recesses becoming clogged, so all drivers fit ScrewArmoured fasteners perfectly.
- ScrewArmour is environmentally friendly containing none of the hazardous substances associated with other market leading coatings.

SCREW **armour**<sup>TM</sup>

**any application, any timber, any metal, inside or out**

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